

All Models Report for Distilbert

MODEL 1

Report for DistilBERT ->

001_01_FullSearch_Raw_LR-2.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin

Config: Data=content, Freeze=none, LoRA=False, LR=2.0E-05, BS=16, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9447

Best Validation Loss: 0.1955

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Test Performance -> 001_01_FullSearch_Raw_LR-2.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin

Test Loss: 0.1969, Accuracy: 0.9446, F1 Score: 0.9451

Confusion Matrix:

[[4674 202]

[352 4772]]

Classification Report:

	precision	recall	f1-score	support
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Neg(0)	0.9300	0.9586	0.9441	4876
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Pos(1)	0.9594	0.9313	0.9451	5124
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accuracy		0.9446		10000
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macro avg	0.9447	0.9449	0.9446	10000
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weighted avg	0.9450	0.9446	0.9446	10000
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MODEL 2

Report for DistilBERT ->

002_01_FullSearch_Raw_LR-4.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin

Config: Data=content, Freeze=none, LoRA=False, LR=4.0E-05, BS=16, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9467

Best Validation Loss: 0.1914

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Test Performance -> 002_01_FullSearch_Raw_LR-4.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin

Test Loss: 0.1937, Accuracy: 0.9465, F1 Score: 0.9477

Confusion Matrix:

```
[[4617 259]
 [ 276 4848]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9436	0.9469	0.9452	4876
Pos(1)	0.9493	0.9461	0.9477	5124
accuracy		0.9465		10000
macro avg	0.9464	0.9465	0.9465	10000
weighted avg	0.9465	0.9465	0.9465	10000

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MODEL 3

Report for DistilBERT ->

003_01_FullSearch_Raw_LR-2.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin

Config: Data=content, Freeze=none, LoRA=False, LR=2.0E-05, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9443

Best Validation Loss: 0.1561

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Test Performance -> 003_01_FullSearch_Raw_LR-2.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin

Test Loss: 0.1586, Accuracy: 0.9425, F1 Score: 0.9435

Confusion Matrix:

```
[[4623 253]
 [ 322 4802]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9349	0.9481	0.9415	4876
Pos(1)	0.9500	0.9372	0.9435	5124
accuracy		0.9425		10000
macro avg	0.9424	0.9426	0.9425	10000
weighted avg	0.9426	0.9425	0.9425	10000

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MODEL 4

Report for DistilBERT ->

004_01_FullSearch_Raw_LR-4.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin

Config: Data=content, Freeze=none, LoRA=False, LR=4.0E-05, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9427

Best Validation Loss: 0.1647

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Test Performance -> 004_01_FullSearch_Raw_LR-4.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin

Test Loss: 0.1694, Accuracy: 0.9407, F1 Score: 0.9414

Confusion Matrix:

[[4643 233]

[360 4764]]

Classification Report:

	precision	recall	f1-score	support
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Neg(0)	0.9280	0.9522	0.9400	4876
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Pos(1)	0.9534	0.9297	0.9414	5124
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accuracy		0.9407		10000
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macro avg	0.9407	0.9410	0.9407	10000
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weighted avg	0.9410	0.9407	0.9407	10000
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MODEL 5

Report for DistilBERT ->

005_02_LoRASearch_Raw_LR-5.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin_R-8_A-16

Config: Data=content, Freeze=none, LoRA=True, LR=5.0E-05, BS=16, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9347

Best Validation Loss: 0.1872

=====

Test Performance ->

005_02_LoRASearch_Raw_LR-5.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin_R-8_A-16

Test Loss: 0.1873, Accuracy: 0.9322, F1 Score: 0.9337

Confusion Matrix:

```
[[4548 328]
 [ 350 4774]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9285	0.9327	0.9306	4876
Pos(1)	0.9357	0.9317	0.9337	5124
accuracy		0.9322		10000
macro avg	0.9321	0.9322	0.9322	10000
weighted avg	0.9322	0.9322	0.9322	10000

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MODEL 6

Report for DistilBERT ->

006_02_LoRASearch_Raw_LR-5.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Config: Data=content, Freeze=none, LoRA=True, LR=5.0E-05, BS=16, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9369

Best Validation Loss: 0.1805

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Test Performance ->

006_02_LoRASearch_Raw_LR-5.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Test Loss: 0.1802, Accuracy: 0.9350, F1 Score: 0.9361

Confusion Matrix:

```
[[4588 288]
 [ 362 4762]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9269	0.9409	0.9338	4876
Pos(1)	0.9430	0.9294	0.9361	5124
accuracy		0.9350		10000
macro avg	0.9349	0.9351	0.9350	10000
weighted avg	0.9351	0.9350	0.9350	10000

MODEL 7

Report for DistilBERT ->

007_02_LoRASearch_Raw_LR-1.0E-04_BS-16_WD-0.01_DO-0.1_Sched-lin_R-8_A-16
Config: Data=content, Freeze=none, LoRA=True, LR=1.0E-04, BS=16, DO=0.1, WD=0.01
Best Validation Accuracy: 0.9366
Best Validation Loss: 0.1786

Test Performance ->

007_02_LoRASearch_Raw_LR-1.0E-04_BS-16_WD-0.01_DO-0.1_Sched-lin_R-8_A-16
Test Loss: 0.1781, Accuracy: 0.9367, F1 Score: 0.9382

Confusion Matrix:

```
[[4564 312]
 [ 321 4803]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9343	0.9360	0.9352	4876
Pos(1)	0.9390	0.9374	0.9382	5124
accuracy		0.9367		10000
macro avg	0.9366	0.9367	0.9367	10000
weighted avg	0.9367	0.9367	0.9367	10000

MODEL 8

Report for DistilBERT ->

008_02_LoRASearch_Raw_LR-1.0E-04_BS-16_WD-0.01_DO-0.1_Sched-lin_R-16_A-32
Config: Data=content, Freeze=none, LoRA=True, LR=1.0E-04, BS=16, DO=0.1, WD=0.01
Best Validation Accuracy: 0.9380
Best Validation Loss: 0.1680

Test Performance ->

008_02_LoRASearch_Raw_LR-1.0E-04_BS-16_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Test Loss: 0.1687, Accuracy: 0.9376, F1 Score: 0.9391

Confusion Matrix:

```
[[4565 311]
 [ 313 4811]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9358	0.9362	0.9360	4876
Pos(1)	0.9393	0.9389	0.9391	5124
accuracy		0.9376		10000
macro avg	0.9376	0.9376	0.9376	10000
weighted avg	0.9376	0.9376	0.9376	10000

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MODEL 9

Report for DistilBERT ->

009_02_LoRASearch_Raw_LR-5.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin_R-8_A-16

Config: Data=content, Freeze=none, LoRA=True, LR=5.0E-05, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9339

Best Validation Loss: 0.1816

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Test Performance ->

009_02_LoRASearch_Raw_LR-5.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin_R-8_A-16

Test Loss: 0.1831, Accuracy: 0.9324, F1 Score: 0.9339

Confusion Matrix:

```
[[4546 330]
 [ 346 4778]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9293	0.9323	0.9308	4876
Pos(1)	0.9354	0.9325	0.9339	5124

accuracy		0.9324	10000	
macro avg	0.9323	0.9324	0.9324	10000
weighted avg	0.9324	0.9324	0.9324	10000

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MODEL 10

Report for DistilBERT ->

010_02_LoRASearch_Raw_LR-5.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Config: Data=content, Freeze=none, LoRA=True, LR=5.0E-05, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9349

Best Validation Loss: 0.1751

=====

Test Performance ->

010_02_LoRASearch_Raw_LR-5.0E-05_BS-32_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Test Loss: 0.1766, Accuracy: 0.9340, F1 Score: 0.9356

Confusion Matrix:

[[4548 328]

[332 4792]]

Classification Report:

	precision	recall	f1-score	support
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Neg(0)	0.9320	0.9327	0.9323	4876
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Pos(1)	0.9359	0.9352	0.9356	5124
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accuracy		0.9340	10000	
macro avg	0.9340	0.9340	0.9340	10000
weighted avg	0.9340	0.9340	0.9340	10000

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MODEL 11

Report for DistilBERT ->

011_02_LoRASearch_Raw_LR-1.0E-04_BS-32_WD-0.01_DO-0.1_Sched-lin_R-8_A-16

Config: Data=content, Freeze=none, LoRA=True, LR=1.0E-04, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9360

Best Validation Loss: 0.1706

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Test Performance ->

011_02_LoRASearch_Raw_LR-1.0E-04_BS-32_WD-0.01_DO-0.1_Sched-lin_R-8_A-16

Test Loss: 0.1718, Accuracy: 0.9365, F1 Score: 0.9379

Confusion Matrix:

[[4570 306]

[329 4795]]

Classification Report:

precision recall f1-score support

Neg(0) 0.9328 0.9372 0.9350 4876

Pos(1) 0.9400 0.9358 0.9379 5124

accuracy 0.9365 10000

macro avg 0.9364 0.9365 0.9365 10000

weighted avg 0.9365 0.9365 0.9365 10000

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MODEL 12

Report for DistilBERT ->

012_02_LoRASearch_Raw_LR-1.0E-04_BS-32_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Config: Data=content, Freeze=none, LoRA=True, LR=1.0E-04, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9398

Best Validation Loss: 0.1686

=====

Test Performance ->

012_02_LoRASearch_Raw_LR-1.0E-04_BS-32_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Test Loss: 0.1686, Accuracy: 0.9408, F1 Score: 0.9424

Confusion Matrix:

[[4565 311]

[281 4843]]

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9420	0.9362	0.9391	4876
Pos(1)	0.9397	0.9452	0.9424	5124
accuracy		0.9408		10000
macro avg	0.9408	0.9407	0.9408	10000
weighted avg	0.9408	0.9408	0.9408	10000

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MODEL 13

Report for DistilBERT ->

013_03_BestFull_Raw_Comp_LR-4.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin

Config: Data=content, Freeze=none, LoRA=False, LR=4.0E-05, BS=16, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9439

Best Validation Loss: 0.1815

=====

Test Performance ->

013_03_BestFull_Raw_Comp_LR-4.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin

Test Loss: 0.1888, Accuracy: 0.9390, F1 Score: 0.9409

Confusion Matrix:

[[4534 342]

[268 4856]]

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9442	0.9299	0.9370	4876
Pos(1)	0.9342	0.9477	0.9409	5124
accuracy		0.9390		10000
macro avg	0.9392	0.9388	0.9389	10000
weighted avg	0.9391	0.9390	0.9390	10000

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MODEL 14

Report for DistilBERT ->

014_04_BestLoRA_Raw_Comp_LR-1.0E-04_BS-32_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Config: Data=content, Freeze=none, LoRA=True, LR=1.0E-04, BS=32, DO=0.1, WD=0.01

Best Validation Accuracy: 0.9367

Best Validation Loss: 0.1691

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Test Performance ->

014_04_BestLoRA_Raw_Comp_LR-1.0E-04_BS-32_WD-0.01_DO-0.1_Sched-lin_R-16_A-32

Test Loss: 0.1710, Accuracy: 0.9377, F1 Score: 0.9389

Confusion Matrix:

[[4593 283]

[340 4784]]

Classification Report:

precision recall f1-score support

Neg(0) 0.9311 0.9420 0.9365 4876

Pos(1) 0.9441 0.9336 0.9389 5124

accuracy 0.9377 10000

macro avg 0.9376 0.9378 0.9377 10000

weighted avg 0.9378 0.9377 0.9377 10000

=====

MODEL 15

Report for DistilBERT ->

015_05_FreezeCls_Raw_Comp_LR-2.0E-04_BS-16_WD-0.01_DO-0.1_Sched-lin

Config: Data=content, Freeze=classifier, LoRA=False, LR=2.0E-04, BS=16, DO=0.1, WD=0.01

Best Validation Accuracy: 0.8981

Best Validation Loss: 0.2524

=====

Test Performance ->

015_05_FreezeCls_Raw_Comp_LR-2.0E-04_BS-16_WD-0.01_DO-0.1_Sched-lin

Test Loss: 0.2683, Accuracy: 0.8913, F1 Score: 0.8933

Confusion Matrix:

```
[[4363 513]
 [ 574 4550]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.8837	0.8948	0.8892	4876
Pos(1)	0.8987	0.8880	0.8933	5124
accuracy		0.8913	10000	
macro avg	0.8912	0.8914	0.8913	10000
weighted avg	0.8914	0.8913	0.8913	10000

=====

MODEL 16

Report for DistilBERT ->

016_06_FreezeTop2_Raw_Comp_LR-4.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin
Config: Data=content, Freeze=top_layers_2, LoRA=False, LR=4.0E-05, BS=16, DO=0.1,
WD=0.01

Best Validation Accuracy: 0.9432

Best Validation Loss: 0.1609

=====

Test Performance ->

016_06_FreezeTop2_Raw_Comp_LR-4.0E-05_BS-16_WD-0.01_DO-0.1_Sched-lin
Test Loss: 0.1616, Accuracy: 0.9424, F1 Score: 0.9435

Confusion Matrix:

```
[[4617 259]
 [ 317 4807]]
```

Classification Report:

	precision	recall	f1-score	support
Neg(0)	0.9358	0.9469	0.9413	4876
Pos(1)	0.9489	0.9381	0.9435	5124

accuracy		0.9424	10000	
macro avg	0.9423	0.9425	0.9424	10000
weighted avg	0.9425	0.9424	0.9424	10000

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